



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: South Florida

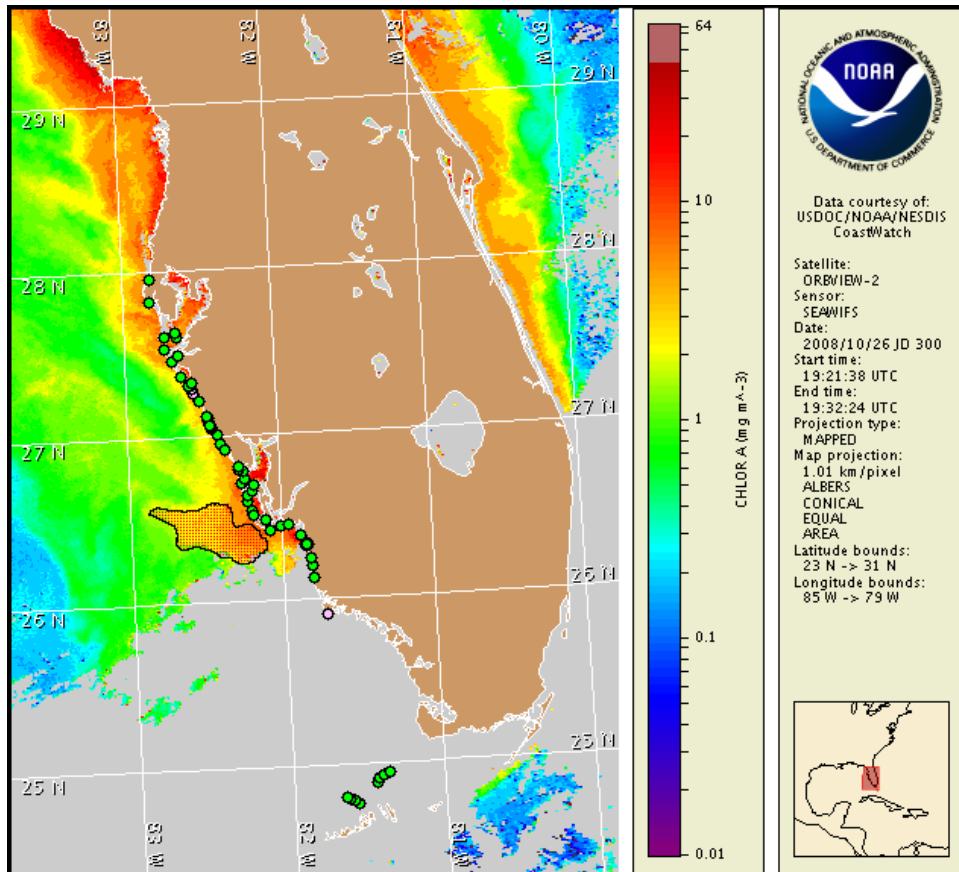
27 October 2008

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: October 23, 2008



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 17 to 23 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.

## Conditions Report

A harmful algal bloom has been identified in patches in the southern Lee/northern Collier County region. Additionally, harmful algae have been identified in central Collier County. Patchy very low impacts are possible today through Thursday in the southern Lee/northern Collier County region. No impacts are expected in central Collier County or elsewhere alongshore southwest Florida today through Thursday, October 30.

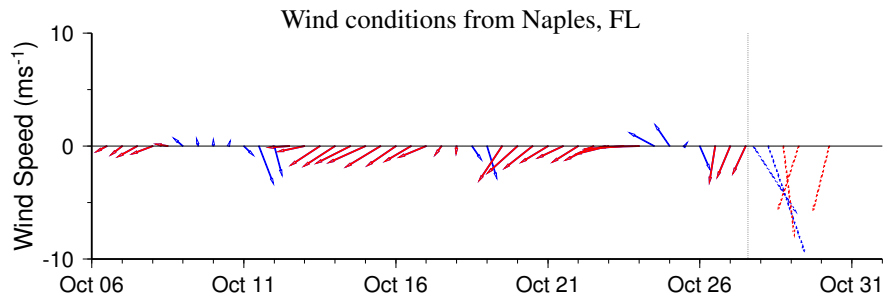
## Analysis

A harmful algal bloom remains present onshore in the southern Lee/northern Collier County region. A previously identified harmful algal bloom may also persist nearshore in northern Lee County from Cayo Costa State Park to Captiva Island, however recent information is not available to confirm this. Background concentrations of *Karenia brevis* were identified by FWRI mid to late last week in southern Lee County (Bonita Beach, 10/22) and central Collier County (Clam Pass, Marco Island, 10/23), where concentrations were previously very low to low (10/20). Elevated concentrations of non-harmful algae also remain present in southern Lee and southern Pinellas County (FWRI, 10/22).

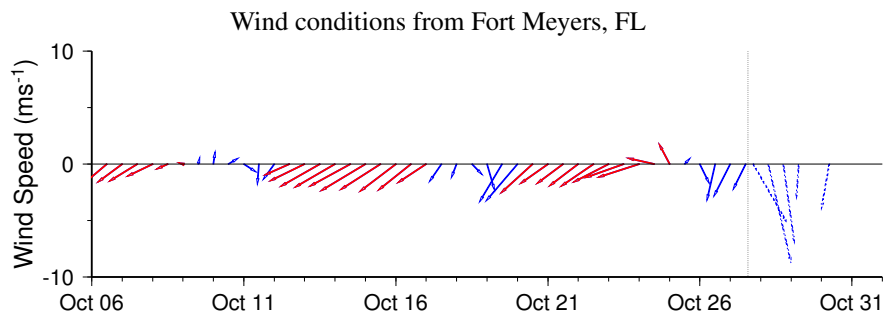
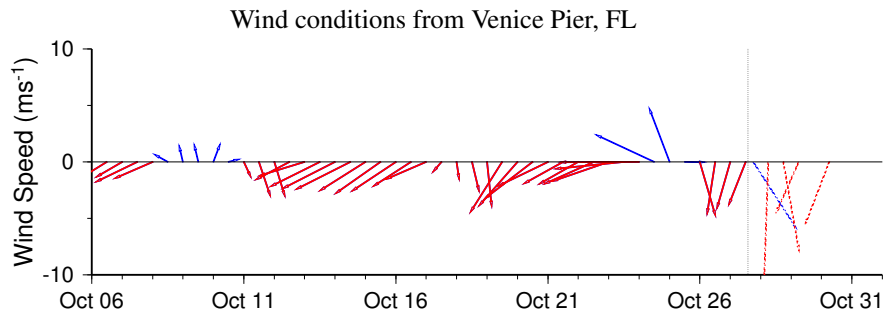
Chlorophyll levels over the past week appear to have decreased offshore southern Lee County (SeaWiFS imagery, 10/21-10/26), but remain elevated ( $2\text{--}7\mu\text{g/L}$ ) up to 15 miles south and 40 miles west of Sanibel Island (SeaWiFS and MODIS imagery, 10/26). Chlorophyll levels remain high ( $>10\mu\text{g/L}$ ) just south of Sanibel Island at  $26^{\circ}24'31''\text{N}$   $82^{\circ}7'12''\text{W}$  and northwest of Barefoot Beach at  $26^{\circ}22'22''\text{N}$   $81^{\circ}55'46''\text{W}$ . Elevated to high chlorophyll levels also remain visible near the coast of Cayo Costa to Captiva Island in northern Lee County. Sampling is highly recommended in these regions onshore and offshore Lee County. Recent imagery has been obscured by clouds in Collier County limiting present analysis.

Upwelling favorable conditions returned yesterday and today after a brief one to two day respite, and are expected to continue throughout the week. Bloom intensification in Lee and Collier Counties, and formation throughout southwest Florida is possible through Thursday. Southerly to southwesterly transport is possible through Thursday, October 30.

~Fisher, Gan

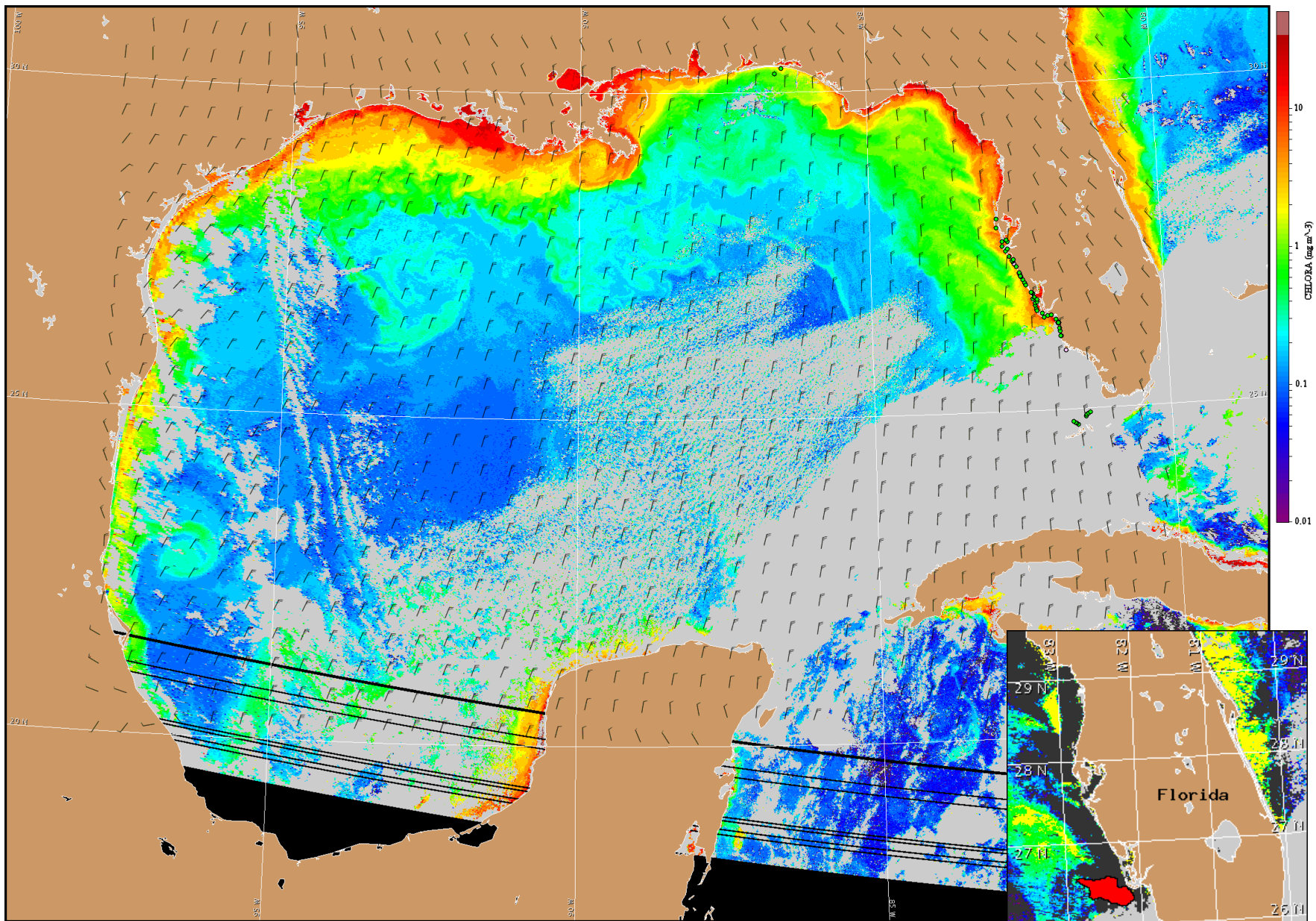


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



## Wind Analysis

North winds at 10-15kn (5-8m/s) today increasing to 20-25kn (10-13m/s) tonight and Tuesday. Continued northerlies Tuesday night (15-20kn, 8-10m/s) and Wednesday (15kn, 8m/s), with northeasterlies in Collier County on Wednesday. Northeast winds Wednesday night and Thursday (15-20kn).



Satellite chlorophyll image and forecast winds for October 28, 2008 12Z with Cell concentration sampling data from October 17 to 23 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).